

Sub  
B1

What is claimed is:

1. A stent comprising:  
a stent body expandable between an un-deployed orientation and a deployed orientation, the stent body having a longitudinal axis extending between first and second open ends;  
the stent body having a plurality of adjacent circumferential support structures, the circumferential support structures being spaced- apart along the longitudinal axis;  
each support structure including longitudinal struts interconnected at apex portions, the longitudinal struts and apex portions defining an undulating pattern, at least some of the apex portions of adjacent circumferential support structures being configured to longitudinally overlap one another when in the un-deployed configuration;  
a plurality of circumferential connecting struts interconnecting at least some of the adjacent circumferential support structures, the circumferential connecting struts extending between the apex portions that overlap one another.
2. The stent of claim 1 wherein in the deployed orientation, adjacent circumferential support structures are offset such that the apex portions on one side of a support structure are positioned intermediate the apex portions on a facing side of an adjacent support structure.
3. The stent of claim 1 wherein at least some of the circumferential connecting struts have a width greater than a width of the longitudinal struts.
4. The stent of claim 1 wherein at least some of the circumferential connecting struts have a width at least twice as great as a width of the longitudinal struts.
5. The stent of claim 1 wherein at least some of the longitudinal struts have widths that taper as the at least some longitudinal struts extend along the stent body longitudinal axis.

00055351-004704  
F02760-158560

FOIA b 7 - D

6. The stent of claim 5 wherein each circumferential support structure comprises pairs of tapered struts alternating with single, non-tapered struts.
7. The stent of claim 6 wherein the pairs of tapered struts are longer than the non-tapered struts.
8. The stent of claim 7 wherein the pairs of longer tapered struts are interconnected by the circumferential connecting struts.
9. The stent of claim 1 wherein the circumferential connecting struts joining first and second adjacent support structures extend in a first direction and the circumferential connecting struts joining second and third support structures extend in a second direction opposite the first direction.
10. The stent of claim 1 wherein some of the longitudinal struts are longer than other longitudinal struts, and wherein the longer longitudinal struts provide the longitudinal overlap at the apex portions.
11. The stent of claim 1 wherein the circumferential connecting struts connecting the apex portions are angled with respect to a circumferential direction.
12. The stent of claim 1 wherein the undulating pattern defines a wavelength, and wherein the circumferential connecting members are at least one half the length of the wavelength.
13. The stent of claim 1, wherein the circumferential connecting members are located between only some of the adjacent pairs of circumferential support structures.

14. The stent of claim 13, wherein some adjacent pairs of circumferential support structures have apex portions that oppose one another, and other adjacent pairs of circumferential support structures have apex portions that are offset from one another.

16. The stent of claim 13, wherein three consecutive circumferential support structures are interconnected by the circumferential connecting members.

a stent body expandable between an un-deployed orientation and a deployed orientation, the stent body having a longitudinal axis extending between first and second open ends;

the stent body having a plurality of adjacent circumferential support structures, the circumferential support structures being spaced- apart along the longitudinal axis;

each support structure including longitudinal struts interconnected at apex portions, the longitudinal struts and apex portions defining an undulating pattern; and

a plurality of circumferential connecting struts interconnecting at least some of the adjacent circumferential support structures, the circumferential connecting struts extending between the apex portions of adjacent circumferential support structures, at least some of the circumferential connecting struts having a width greater than a width of the longitudinal struts.

18. The stent of claim 17 wherein at least some of the circumferential connecting struts have a width at least twice as great as the width of the longitudinal struts.

0955331.09194  
FD/TD/FMS60

19. A stent comprising:
- a stent body expandable between an un-deployed orientation and a deployed orientation, the stent body having a longitudinal axis extending between first and second open ends;
  - the stent body having a plurality of adjacent circumferential support structures, the circumferential support structures being spaced- apart along the longitudinal axis;
  - each support structure including longitudinal struts interconnected at apex portions, the longitudinal struts and apex portions defining an undulating pattern; and
  - a plurality of circumferential connecting struts interconnecting only some of the adjacent circumferential support structures, the circumferential connecting struts extending between the apex portions of adjacent circumferential support structures, wherein some pairs of adjacent circumferential support structures have apex portions that oppose one another, and other pairs of adjacent support structures have apex portions that are offset by the circumferential connecting struts.
20. The stent of claim 19, wherein only alternating pairs of circumferential support structures are interconnected by the circumferential support structures.